

Dana

8/27/85

Re: Vulcan

Dave Crawford apparently sent a letter to the state advising them of things they should be doing w/ w/ t. Vulcan.

Please get a copy of that letter from the file ~~and~~ or Dave and let's see what if anything the state may have done. Check first w/ Dave and then we'll call the state.

Thanks,
Dale

KSD 007482029

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Superfund

APR 24 1984

Mr. Bill Bryson
Bureau of Oilfields & Environmental Geology
Kansas Department of Health and Environment
Forbes Field
Topeka, Kansas 66620

Dear Mr. Bryson:

As you know, the Environmental Protection Agency (EPA) Waste Management Branch (WMRB) has requested and received a large volume of documents regarding remedial and monitoring actions being conducted by the Vulcan and the Kansas Department of Health & Environment (KDHE) at the Vulcan Chemicals Company (VMC) site southwest of Wichita. We have now completed our preliminary review of these documents. We offer the following comments or recommendations for your consideration regarding future actions at this site.

1. A preliminary comment is in order here. Anyone reviewing the history or files on this site will recognize that KDHE has caused significant improvements implemented in the operations and waste disposal practices at this site. Therefore, our additional comments and/or recommendations are not intended as a criticism of any of the previous state actions on this site. Rather we have attempted to look at the site's current status and make positive recommendations for future actions at the site.
2. It appears that Vulcan is conducting many or all of the chemical analyses on groundwater samples in-house. Slight variations in the levels of the chlorinated organic compounds could have significant influence on interpretations of the groundwater quality and contaminants movement, and modelling of contaminant transport. Have the QA/QC procedures and documentation of the Vulcan laboratory been reviewed and approved to the satisfaction of KDHE? EPA also recommends that the Vulcan laboratory participate in an independent audit sample to assure their capability for analyzing for the parameters of concern at this site. If the Vulcan laboratory is judged to be capable in this regard we would also recommend that the laboratory program be periodically reevaluated to assure its continued capability. KDHE may also wish to observe and evaluate Vulcan's collection, handling and management of groundwater samples.

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3. As you know, groundwater is being pumped from both the shallow and deeper aquifers as part of the remedial actions at this site. File information and discussions with Vulcan have indicated that Vulcan has been pumping the deeper aquifer at a reduced rate as compared to the shallow aquifer. Vulcan's justification for this is that they want to maintain an upward gradient on groundwater flow, which will tend to offer some protection of the deeper aquifer from additional contamination from the surface and near surface contamination. There are a number of trade-offs to be considered and evaluated in considering pumping rates of the shallow and deep aquifers. I am sure you would agree that these issues are too complex to discuss in this letter. EPA recommends that Vulcan conduct a mini-feasibility study to evaluate the relative pumping rates for the shallow and deeper aquifers. If this was not already done by Vulcan, this information Region VII
4. Recent discussions with Vulcan personnel have indicated that the modelling done by Prickett on this site did not produce any conclusive, predictive results. EPA has not received or requested a copy of the modelling work done by Prickett. EPA recommends that KDHE obtain a copy of the modelling work done by Prickett and conduct an independent evaluation to determine if KDHE reaches the same conclusions. If KDHE desires, EPA may be able to provide you some assistance in reviewing the modelling work done on this site. Given the volume of water being removed from the shallow aquifers and the length of time the pumping has been conducted, one would expect to begin to see some improvement in groundwater quality. If no improvement in groundwater quality are observed within the next year of groundwater monitoring, KDHE may wish to consider requiring a mass water balance study of the VMC site.
5. We understand that Vulcan has recently installed a number of flowmeters in the groundwater monitoring wells at this site. We also understand that Vulcan has installed, and is now operating, an additional interceptor well to control the release of contaminated groundwater to the southwest. At the time that EPA received information for our review, information was not available on either of these recent developments. EPA recommends that KDHE obtain sufficient information on these recent developments and incorporate it into your ongoing evaluation of this site.
6. The Environmental Protection Agency requests the opportunity to receive and review another year's worth of data on this site. Upon receipt and review of data from 1983 and 1984, EPA would again provide comments and recommendations to KDHE.
7. Please be advised that this review did not attempt to address deep well injection of wastes or water at this site. Underground injection is generally not within the scope or jurisdiction of the Superfund/uncontrolled sites program. Underground injection is regulated in the State of Kansas by KDHE and the EPA Water Division (WATR). WATR is recommending that WATR review the appropriateness of deep well injection of water and/or wastes at this site.

8. We understand that Vulcan Materials Company has been very willing to cooperate with KDHE, but we suggest that consideration be given to completing further actions under a consent administrative order thus assuring an enforceable process.

9. Given the extensive work done at the site we believe a community involvement program to be conducted by KDHE would serve the Department well in gaining community support.

10. The 1982 Annual Report contains some discussion of installing additional groundwater monitoring wells to the southeast, which is the natural direction of groundwater flow. Region VII suggests that KDHE determine the areal extent of groundwater contamination to the southeast, if this has not already been done by Vulcan. The file information Region VII has received and reviewed, which was current up to the 1982 Annual Report, contain no additional information about contaminant levels southeast of the site.

Many of the issues involved are extremely technical and as a result difficult to adequately address in a letter. Therefore, EPA will be available to meet with you to further discuss these issues. Please contact me or Dave Crawford if you have any questions or to set up a meeting to discuss these matters further.

Sincerely yours,

Robert L. Morby
Chief, Waste Management Branch
Air and Waste Management Division

cc: Barbara Sabol, KDHE
Dennis Murphey, KDHE
bcc: Paul Walker, WATR
Karen Flournoy, PMTS

Sincerely,

Dave L. Crawford
District Director, AUSA Site
Region VII, Air and Waste Management Division
U.S. Environmental Protection Agency